

10/602,915**AMENDMENT TO THE CLAIMS**

1. (Previously presented) A semiconductor device comprising:
a gate insulating film having a multilayer structure including a zirconium oxide film
and a high dielectric constant film which is formed of an oxide of a metal other than
zirconium and substantially directly contacting the zirconium oxide film,
wherein the high dielectric constant film is a hafnium oxide film or a hafnium
aluminate film.
2. (Canceled)
3. (Original) The semiconductor device of claim 1, wherein the high dielectric
constant film contains nitrogen.
4. (Original) The semiconductor device of claim 1, wherein the gate insulating film
includes a zirconium silicate film formed under the zirconium oxide film.
- 5-20. (Canceled)
21. (Previously presented) A semiconductor device comprising:
a gate insulating film having a multilayer structure including a zirconium oxide film
and a high dielectric constant film which is formed of an oxide of a metal other than
zirconium and substantially directly contacting the zirconium oxide film,
wherein the high dielectric constant film is a hafnium oxide film, a hafnium silicate
film, or a hafnium aluminate film,

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wherein the gate insulating film includes a zirconium silicate film formed under the zirconium oxide film.

22. (New) The semiconductor device of claim 1, wherein the gate insulating film includes a silicon nitride film formed under the zirconium oxide film.

23. (New) The semiconductor device of claim 22, wherein the silicon nitride film has a thickness of 1 nm or less.

24. (New) The semiconductor device of claim 1, further comprising a gate electrode on the gate insulating film.

25. (New) The semiconductor device of claim 24, wherein the gate electrode is a titanium nitride film.

26. (New) The semiconductor device of claim 24, wherein the gate electrode has a thickness of not less than 30 nm and not more than 100 nm.

27. (New) The semiconductor device of claim 24, further comprising a sidewall formed to cover the side faces of the gate electrode.

28. (New) The semiconductor device of claim 21, wherein the high dielectric constant film contains nitrogen.

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29. (New) The semiconductor device of claim 21, wherein the gate insulating film includes silicon nitride film formed under the zirconium oxide film.

30. (New) The semiconductor device of claim 29, wherein the silicon nitride film has a thickness of 1 nm or less.

31. (New) The semiconductor device of claim 24, further comprising a gate electrode on the gate insulating film.

32. (New) The semiconductor device of claim 31, wherein a gate electrode is a titanium nitride film.

33. (New) The semiconductor device of claim 31, wherein the gate electrode has a thickness of not less than 30 nm and not more than 100 nm.

34. (New) The semiconductor device of claim 31, further comprising a sidewall formed to cover the side faces of the gate electrode.

35. (New) The semiconductor device of claim 1, wherein the high dielectric constant film substantially directly contacts the top surface of the zirconium oxide film.

36. (New) The semiconductor device of claim 21, wherein the high dielectric constant film substantially directly contacts the top surface of the zirconium oxide film.